

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-38. (Cancelled)

39. (Currently Amended) A method for performing knowledge discovery comprising the steps of:

~~appending to~~ associating with each member of a data corpus one or more metatags; ~~wherein said step of appending comprises the step of executing through execution of~~ a ranking function, ~~wherein said ranking function is controllable through a parameter value;~~

selecting a first subset of members from said data corpus whose ~~appended~~ associated metatags are a match to a first set of criteria;

~~processing said first subset of members to produce~~ generating a set of pairwise associations between elements of each of said first subset of members;

~~selecting a subset of said set of pairwise associations that reach a certain predefined or preset value;~~

~~identifying a second subset of members from said data corpus based on said subset of said pairwise associations;~~

~~computing a utility function to measure a utility associated with said second subset of members;~~

~~adjusting said parameter value to an adjusted parameter value based on said utility function;~~

~~calculating a value, for each pairwise association, representative of the number of times that each respective pairwise association occurs across said subset of members; and~~

~~generating retrospective metatagging based on one or more of said set of pairwise associations, wherein said step of generating retrospective metatagging comprises the step of modifying said ranking function~~

associating one or more members of said data corpus with one or more retrospective metatags through execution of said ranking function controlled by said adjusted parameter value;

and

selecting a third subset of members from said data corpus whose associated metatags are a match to a second set of criteria.

40. (Previously Presented) The method of claim 39, wherein said one or more metatags describe content of a respective member of said data corpus.

41. (Previously Presented) The method of claim 39, wherein said one or more metatags represent one or more concept classes contained in a respective member of said data corpus.

42. (Previously Presented) The method of claim 41, wherein said one or more concept classes are inferred through the presence of one or more feature vectors in one or more respective members of said data corpus.

43. (Currently Amended) The method of claim 39, wherein said first set of criteria are selected by a user.

44. (Currently Amended) The method of claim 39, wherein said pairwise associations are pairwise associations between concepts and further comprising the step of calculating a value, for each pairwise association, representative of the number of times that each respective pairwise association occurs across said second subset of members.

45. (Previously Presented) The method of claim 39, wherein said elements are nouns and/or noun phrases.

46. (Cancelled)

47. (Currently Amended) The method of claim 39, further comprising the steps of:
generating a second set of pairwise associations between elements of said ~~second~~ third subset of members; and

calculating a ~~second~~ value, for each pairwise association, representative of the number of times that each respective pairwise association occurs across said ~~second~~ third subset of members.

48. (Currently Amended) The method of claim 47, further comprising the step of ~~modifying~~ changing said first set of criteria to said second set of criteria based on said utility function.

49. (Currently Amended) The method of claim 47, wherein said elements are nouns and/or noun phrases and further comprising the step of identifying pairwise associations having a respective said ~~second~~ value reaching a predetermined threshold.

50. (Currently Amended) The method of claim 49, further comprising the step of extracting elements of said ~~second~~ third subset of members associated with said identified pairwise associations having a respective said second value reaching said predetermined threshold.

51. (Currently Amended) A method for performing knowledge discovery, the method comprising the steps of:

determining a first degree of correlation among a data corpus;
~~indexing~~ metatagging members of said data corpus with metatags according to a metatagging scheme, wherein said metatagging scheme employs a first level of knowledge representation for said first degree of correlation and employs at least a second level of knowledge representation for a second degree of correlation among data, wherein said step of indexing is controllable through a parameter value, and wherein said first and second levels of knowledge representation are representative of different degrees of correlation among data;

determining said second degree of correlation among a first subset of said data corpus;
identifying a second subset of members from said data corpus based on said second degree of correlation among said first subset of said data corpus;

computing a utility function to measure a utility of said second subset of members;
adjusting said parameter value to an adjusted parameter value based on said utility function, and

~~reindexing~~ remetatagging said members of said data corpus with metatags according to said metatagging scheme ~~based on said determined second degree of correlation,~~ wherein said step of remetatagging is controlled through said adjusted parameter value.

52. (Currently Amended) The method of claim 51, further comprising the step of selecting said first subset of members from said data corpus whose metatags are a match to a set of criteria.

53. (Currently Amended) The method of claim 52, further comprising the step of selecting a second subset of said data corpus whose ~~reindexed~~ metatags are a match to said set of criteria.

54. (Previously Presented) The method of claim 51, wherein said step of determining a first degree of correlation comprises the step of identifying one or more concept classes contained in a respective member of said data corpus.

55. (Currently Amended) The method of claim 51, wherein said step of determining a first degree of correlation comprises the step of generating a set of pairwise associations of nouns and/or nouns phrases between elements of said first subset of members.

56. (Currently Amended) The method of claim 55, further comprising the step of calculating a value, for each pairwise association, representative of the number of times that each respective pairwise association occurs across said first subset of members.

57. (Previously Presented) The method of claim 51, wherein said step of determining a first degree of correlation comprises the step of generating a set of subject noun-verb-object noun associations drawn from a portion of said data corpus.

58. (Previously Presented) The method of claim 51, wherein said step of determining a first degree of correlation comprises the step of identifying context associations across a portion of said data corpus.

59. (Cancelled).

60. (Currently Amended) The method of claim 54, wherein said step of determining said second degree of correlation comprises the step of generating a set of pairwise associations of nouns and/or nouns phrases between elements of said first subset of members.

61. (Currently Amended) The method of claim 60, further comprising the step of calculating a value, for each pairwise association, representative of the number of times that each respective pairwise association occurs across said first subset of members.

62. (Previously Presented) The method of claim 51, wherein said step of determining said second degree of correlation comprises the step of generating a set of subject noun-verb-object noun associations drawn from a portion of said data corpus.

63. (Previously Presented) The method of claim 51, wherein said step of determining said second degree of correlation comprises the step of identifying context associations across a portion of said data corpus.

64. (Previously Presented) The method of claim 51, wherein said step of determining said second degree of correlation comprises the step of identifying semantic associations across a portion of said data corpus.

65. (Currently Amended) The method of claim 51, wherein said first ~~second~~ level of knowledge representation is associated with a category of data selected from the group consisting of: nouns and/or nouns phrases, noun-verb-object noun associations, context associations, or semantic associations.

66. (Previously Presented) The method of claim 65, wherein said second level of knowledge representation is associated with a category of data selected from the group consisting of: noun-verb-object noun associations, context associations, or semantic associations.

67. (Previously Presented) The method of claim 65, wherein said second level of knowledge representation is associated with a higher level of abstraction than said first level of knowledge representation.

68. (New) The method of claim 39, wherein said third subset of members is greater in number than said first set of members.

69. (New) The method of claim 39, wherein one or more members of said data corpus are images.

70. (New) The method of claim 39, wherein said parameter value comprises a vector of parameters.

71. (New) The method of claim 39, further comprising the step of calculating a value, for each pairwise association, representative of the number of times that each respective pairwise association occurs across said first subset of members.

72. (New) The method of claim 51, wherein said step of determining a first degree of correlation comprises the step of generating a set of pairwise associations of concepts between elements of said first subset of members.

73. (New) The method of claim 72, further comprising the step of calculating a value, for each pairwise association, representative of the number of times that each respective pairwise association occurs across said first subset of members.